

CLAIMS

- 1 1. A method for storing and distributing data in a network storage system having a
2 plurality of devices interconnected with one or more switches, the method comprising the
3 steps of:
4 writing, by one of the plurality of devices, a set of data to a memory associated
5 with a port of one of the one or more switches, the memory being readable by all of the
6 plurality of devices; and
7 reading, by one of the plurality of devices, the set of data from the memory.
- 1 2. The method of claim 1, wherein the set of data further comprises:
2 an unique identification of one of the devices; and
3 an address of the one of the devices.
- 1 3. The method of claim 2, wherein the unique identification of one of the devices
2 further comprises a unique serial number of the device.
- 1 4. The method of claim 2, wherein the address of one of the devices further com-
2 prises a fully qualified network address.
- 1 5. The method of claim 1, wherein the set of data further comprises identification of
2 one or more disks that are offline and inaccessible to any of the plurality of devices.
- 1 6. The method of claim 5, wherein the identification further comprises a world wide
2 name.
- 1 7. The method of claim 5, wherein the identification further comprises a disk identi-
2 fication string, the disk identification string indicating a name of a switch, a port number
3 on the switch, and a disk number.

- 1 8. The method of claim 1, wherein the memory associated with a port further com-
2 prises a Symbolic Port Name field.
- 1 9. A network storage system comprising:
2 one or more switches having a plurality of ports, each switch having a memory
3 associated with the port;
4 a plurality of file servers interconnected with the one or more switches;
5 a plurality of disks, each disk of the plurality of disks connected to at least one of
6 the one or more switches; and
7 one of the plurality of file servers writing a set of data to the memory associated
8 with one of the ports of one of the one or more switches.
- 1 10. The network storage system of claim 5, wherein the set of data further comprises:
2 a unique identification of one of the devices; and
3 an address of the one of the devices.
- 1 11. The network storage system of claim 9, wherein the unique identification of one
2 of the devices further comprises an unique serial number.
- 1 12. The network storage system of claim 9, wherein the address further comprises a
2 fully qualified network address.
- 1 13. A network storage system comprising:
2 one or more switches having a plurality of ports, each switch having a memory
3 associated with the port;
4 a plurality of file servers interconnected with the one or more switches;
5 a plurality of disks, each disk of the plurality of disks connected to at least one of
6 the one or more switches; and
7 one of the plurality of file servers, in response to one of the plurality of disks be-
8 ing offline, writing a identification information to one of the ports of one of the switches.

1 14. The network storage system of claim 13, wherein the plurality of switches com-
2 prise fibre channel switches operatively interconnected to define a switching fabric.

1 15. The network storage system of claim 13, wherein the memory associated with the
2 port further comprises a Symbolic Port Name field.

1 16. A computer-readable medium, including program instructions executing on a file
2 server, for storing and distributing data in a network storage system, the program instruc-
3 tions performing the steps of:

4 writing a set of data to a memory associated with a port of a switch, the memory
5 being readable by all of a plurality of devices connected to the network storage system.